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Agricultural Memorandum No 621

Summer Milk and Soil Moisture Deficits

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The following work was done several years ago, but cannot be traced in the Ag Mem series.

Attention was concentrated on

a. Week of maximum yield per cow in recorded herds.

b. Week after which there was a rapid drop in yield in recorded herds.

Weeks are numbered from beginning of April; year unspecified (late 1950s). Potential SMDs were evaluated for sample stations in each MMB region using "old" PT values. The results were:-

	Region	Maximum Yield		Start of rapid drop		Sample rainfall station
		Week	PSMD	Week	PSMD	
1.	North	10	2.5	12	4.4	Silloth
2.	Northwest	6	2.7	9	3.6	Manchester Ringway
3.	East	5	2.4	8	3.7	Mildenhall
4.	E. Midlands	6	2.5	9	4.2	Sutton Bonington
5.	W. Midlands	5	2.3	10	4.2	Shawbury
6.	N. Wales	8	2.6	11	4.6	Wrexham
7.	S. Wales	5	2.2	11	4.3	Port Talbot
8.	South	8	2.4	10	3.9	Abingdon
9.	Mid-West	5	2.4	10	4.2	Cannington
10.	Far West	7	1.9	9	3.5	Starcross
11.	Southeast	5	2.3	11	3.8	E. Malling
	Mean		2.4 inches		4.0 inches	
	Standard Deviation		0.2		0.34	

It is suggested that SMD is possibly a sufficient criterion for peak production date, but that if SMDs remain low, the peak could be determined by other factors such as grass growth stage or lactation curve.

Any comments or suggestions on this paper should be referred to the author.

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